

AB014. SOH22ABS095. Role of prophylactic mesh placement at index operation for prevention of parastomal hernia

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Background: Parastomal hernia (PSH) is a common problem following stoma formation with rate of PSH up to 70%. The optimal technique for stoma formation is unknown although recent studies have focused on whether placement of prophylactic mesh at stoma formation can reduce PSH rates.

Methods: A systematic search was performed using Medline, Embase, Clinical Trials registry and the Cochrane Library to identify randomised controlled trials that analysed placement of prophylactic mesh versus no mesh at time of initial surgery. The primary outcome was incidence of PSH and secondary outcome was Re operation, PSH requiring repair, operative time and stoma or mesh related complications. Meta-analysis was performed using EndnoteX9 and RevMan 5.4 software was used for statistics.

Results: Total of 12 studies were included, involving 1,059 patients (500 mesh *vs.* 559 no mesh). Prophylactic mesh placement resulted in a lower rate of PSH formation [123/500 (24.6%) *vs.* 228/559 (40.8%)] with a combined risk ratio of 0.54 [95% confidence interval (CI): 0.38–0.77]. Placement of prophylactic mesh did not result in increased peristomal complications.

Conclusions: Prophylactic placement of mesh at primary stoma formation may reduce the incidence of PSH,

without an increase in peristomal complications. However, the results of recent multicentre trials didn't show any significant difference when compared to overall number of patients. Heterogeneity of the studies in this analysis is high and overall quality of evidence for prophylactic mesh is low.

Keywords: Parastomal hernia (PSH); prophylactic mesh; prevention; surgical stoma; peristomal complication

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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